

CLAIMS

1. A conjugated compound comprising:
 - a) a ST receptor binding moiety; and,
 - b) an active moiety;
- 5 wherein said active moiety is a radiostable active agent.
2. The compound of claim 1 wherein said ST receptor binding moiety is a peptide.
3. The compound of claim 1 wherein said ST receptor binding moiety is selected from the group consisting of: SEQ ID
10 NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and fragments and derivatives thereof.
4. The compound of claim 1 wherein said ST receptor binding moiety is selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:54.
- 15 5. The compound of claim 1 wherein said an active moiety is a therapeutic agent.
6. The compound of claim 1 wherein said an active moiety is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabioside, etoposide, 5-4
20 fluorouracil, melphalan, chlorambucil, cis-platinum, vindesine, mitomycin, bleomycin, purothionin, macromomycin, 1,4-benzoquinone derivatives, trenimon, ricin, ricin A chain, *Pseudomonas* exotoxin, diphtheria toxin, *Clostridium perfringens* phospholipase C, bovine pancreatic ribonuclease, pokeweed
25 antiviral protein, abrin, abrin A chain, cobra venom factor, gelonin, saporin, modeccin, viscumin, volkensin, alkaline phosphatase, nitroimidazole, metronidazole and misonidazole.
7. The compound of claim 1 wherein:
 - a) said ST receptor binding moiety is selected from
30 the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and fragments and derivatives thereof;

b) said an active moiety is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabioside, etoposide, 5-4 fluorouracil, melphalan, chlorambucil, *cis*-platinum, vindesine, mitomycin, bleomycin, 5 purothionin, macromomycin, 1,4-benzoquinone derivatives, trenimon, ricin, ricin A chain, *Pseudomonas* exotoxin, diphtheria toxin, *Clostridium perfringens* phospholipase C, bovine pancreatic ribonuclease, pokeweed antiviral protein, abrin, abrin A chain, cobra venom factor, gelonin, saporin, 10 modeccin, viscumin, volkensin, alkaline phosphatase, nitroimidazole, metronidazole and misonidazole.

8. The compound of claim 1 wherein said an active moiety is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabioside, *cis*-platin, 15 vindesine, mitomycin and bleomycin, alkaline phosphatase, ricin A chain, *Pseudomonas* exotoxin and diphtheria toxin.

9. The compound of claim 1 wherein:

a) said ST receptor binding moiety is selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, 20 SEQ ID NO:6 and SEQ ID NO:54; and

b) said an active moiety is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabioside, *cis*-platin, vindesine, mitomycin and bleomycin, alkaline phosphatase, ricin A chain, *Pseudomonas* 25 exotoxin and diphtheria toxin.

10. A pharmaceutical composition comprising:

a) a pharmaceutically acceptable carrier or diluent, and,

b) a conjugated compound according to claim 1.

30 11. A method of treating an individual suspected of suffering from metastasized colorectal cancer comprising the steps of administering to said individual a pharmaceutical composition according to claim 10.

12. A pharmaceutical composition comprising:

a) a pharmaceutically acceptable carrier or diluent,

and,

b) conjugated compound comprising:

- 5 i) a ST receptor binding moiety; and,
ii) an active moiety;

wherein said active moiety is a radioactive agent and said conjugated compound is present in an amount effective for therapeutic or diagnostic use in a humans suffering from
10 colorectal cancer.

13. The pharmaceutical composition of claim 12 wherein said active moiety is selected from the group consisting of:

⁴⁷Sc, ⁶⁷Cu, ⁹⁰Y, ¹⁰³Pd, ¹²³I, ¹²⁵I, ¹³¹I, ¹⁸⁶Re, ¹⁸⁸Re, ¹⁹⁹Au, ²¹¹At, ²¹²Pb, ²¹²B, ³²P and ³³P, ⁷¹Ge, ⁷⁷As, ¹⁰³Pb, ¹⁰⁵Rh, ¹¹¹Ag, ¹¹⁹Sb, ¹²¹Sn, ¹³¹Cs,
15 ¹⁴³Pr, ¹⁶¹Tb, ¹⁷⁷Lu, ¹⁹¹Os, ^{193m}Pt and ¹⁹⁷Hg.

14. The pharmaceutical composition of claim 12 wherein said active moiety is selected from the group consisting of:

⁴³K, ⁵²Fe, ⁵⁷Co, ⁶⁷Cu, ⁶⁷Ga, ⁶⁸Ga, ⁷⁷Br, ⁸¹Rb/^{81m}Kr, ^{87m}Sr, ^{99m}Tc, ¹¹¹In, ^{113m}In, ¹²³I, ¹²⁵I, ¹²⁷Cs, ¹²⁹Cs, ¹³¹I, ¹³²I, ¹⁹⁷Hg, ²⁰³Pb and ²⁰⁶Bi.

20 15. The pharmaceutical composition of claim 12 wherein said ST receptor binding moiety is a peptide.

16. The pharmaceutical composition of claim 12 wherein said ST receptor binding moiety is selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and

25 fragments and derivatives thereof.

17. The pharmaceutical composition of claim 12 wherein said ST receptor binding moiety is selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:54.

30 18. The pharmaceutical composition of claim 12 wherein

said ST receptor binding moiety is selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:54; and

5 said active moiety is selected from the group consisting of ^{47}Sc , ^{67}Cu , ^{90}Y , ^{109}Pd , ^{123}I , ^{125}I , ^{131}I , ^{186}Re , ^{188}Re , ^{199}Au , ^{211}At , ^{212}Pb , ^{212}B , ^{32}P and ^{33}P , ^{71}Ge , ^{77}As , ^{103}Pb , ^{105}Rh , ^{111}Ag , ^{119}Sb , ^{121}Sn , ^{131}Cs , ^{143}Pr , ^{161}Tb , ^{177}Lu , ^{191}Os , $^{193\text{M}}\text{Pt}$ and ^{197}Hg .

19. The pharmaceutical composition of claim 12 wherein said ST receptor binding moiety is selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:54; and

15 said active moiety is selected from the group consisting of ^{43}K , ^{52}Fe , ^{57}Co , ^{67}Cu , ^{67}Ga , ^{68}Ga , ^{77}Br , $^{81}\text{Rb}/^{81\text{M}}\text{Kr}$, $^{87\text{M}}\text{Sr}$, $^{99\text{M}}\text{Tc}$, ^{111}In , $^{113\text{M}}\text{In}$, ^{123}I , ^{125}I , ^{127}Cs , ^{129}Cs , ^{131}I , ^{132}I , ^{197}Hg , ^{203}Pb and ^{206}Bi .

20. A method of radioimaging metastasized colorectal cancer cells comprising the steps of administering to an individual a pharmaceutical composition comprising:

- 20 and,
- a) a pharmaceutically acceptable carrier or diluent,
 - b) conjugated compound comprising:
 - i) a ST receptor binding moiety; and,
 - ii) an active moiety;

wherein said active moiety is a radioactive agent and said 25 conjugated compound is present in an amount effective for diagnostic use in a humans suffering from colorectal cancer.

21. A method of treating an individual suspected of suffering from metastasized colorectal cancer comprising the steps of administering to said individual a pharmaceutical 30 composition comprising:

- a) a pharmaceutically acceptable carrier or diluent, and,
- b) conjugated compound comprising:
 - i) a ST receptor binding moiety; and,

ii) an active moiety;
wherein said active moiety is a radiostable agent or
radioactive agent and said conjugated compound is present in an
amount effective for therapeutic or diagnostic use in a humans
5 suffering from colorectal cancer.

22. A method of delivery a nucleic acid molecule to
intestinal tract cells of an individual comprising the steps of
administering to said individual a pharmaceutical composition
comprising:

- 10 a) a pharmaceutically acceptable carrier or diluent,
and,
b) a composition comprising:
i) a ST receptor ligand; and,
ii) a nucleic acid molecule.